

Item #11
October 6, 2010
Energy Commission Business Meeting

QUALLION LLC

Grant Agreement
For
Pilot Automated Manufacturing Line for Lithium-Ion Battery Modules

Summary

Quallion LLC, a California based Lithium-ion (Li-ion) battery manufacturer, is developing a pilot scale, automated manufacturing line capable of producing 10,000 1kWh Li-ion modules.

Li-ion batteries have existed in the electronics market (cell phone, laptops) for years; these applications require simple single-cell or small battery packs. However, the transportation market requires much larger battery systems with thousands of cells. The battery module for transportation is the single most expensive component in an electric vehicle, up to 50% of the purchase price. Quallion is automating the module building process to mass produce battery modules that can be produced with a lower price point and in large volumes making them less costly for use in transportation applications.

Quallion is designing a common base module structure to promote standardization in module size, module design, battery size, or battery design. At this time there is no vehicle technology standard in these categories. This pilot line will make Quallion a ground-breaker in Li-ion battery systems development and production.

The Energy Commission is providing \$1,026,072 from the Alternative and Renewable Fuel and Vehicle Transportation program fund and Quallion will provide \$1,026,072 in match.

Benefits

Quallion will be capable of reducing its battery manufacturing costs. Once deployed into vehicle these batteries have the potential to reduce carbon emissions by 68% on a per vehicle basis.

Quallion is a California company in the Sylmar area. This project will generate 50-100 temporary and 100 – 200 permanent jobs in the next three years. In addition Quallion uses local suppliers for a vast majority of its operations.

Participants

Quallion is a California based company which manufactures Li-ion modules. Quallion will be the sole participant in the project.